CHAPTER 6 - Project Cost, Scope, and Schedule Changes

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ARTICLE 1 - General

Caltrans' Goal

Caltrans' project delivery performance is judged on delivery of quality projects, on schedule, and within budget. Caltrans' goal is to excel at meeting these performance objectives, and to do so in a cost-effective manner.

Change Approval Authority

The Director has delegated departmental responsibility for approving changes in project scope, cost, and schedules to the Deputy Director for Finance. The Deputy Director for Project Development provides the necessary engineering evaluations of the district's proposed changes to guide these approvals. Approvals received through this process do not constitute a change in the programming documents. Changes in the programming documents occur either by amendments or through the normal programming process. It should be noted that only the CTC can change the programmed cost and programmed fiscal year for projects in most programming documents; the Program Manager of the Programming Program approves amendments to the State Highway Operation and Protection Program (SHOPP).

District Responsible for Project Delivery

The Director has also delegated responsibility for project delivery to the District Directors. Caltrans has made a commitment to use a Project Management System to ensure that the individual projects are delivered on time and within budget.

Purpose of Procedures

The Scope, Cost and Schedule Management Procedures were developed to reflect Caltrans' commitment to deliver all programmed projects on schedule and within budget. They establish a process that ensures that decisions affecting delivery commitments are well documented and consider all possible alternatives. Value Analysis studies are recommended to avoid the need for a cost, scope, or schedule change. The procedures also establish delegation thresholds below which the District Director may approve changes.

Processing Change Requests

The *Project Management Procedures Manual* and modifying memoranda provide details and format for requesting changes in project scope, cost, and schedule. Approvals delegated to the districts are also specified.

Procedures for Special Funded Projects

Procedures for management of the cost and schedule of special funded projects, which are not listed in a programming document, are provided for in the Cooperative Agreement for the project if done by Caltrans as reimbursed work, or otherwise is under the control of the local agency or private entity. Project scope must be in accordance with the project Cooperative Agreement.

ARTICLE 2 - Definition of Terms

Programming Documents

- State Transportation Improvement Program (STIP)
- State Highway Operation and Protection Program (SHOPP)
- Transportation System Management Plan (TSM Plan)
- Toll Bridge Program

Programmed Year

The State Fiscal Year (SFY) in which the project construction dollars are shown in a programming document or a subsequent amendment.

Programmed Cost

The sum of escalated construction and R/W costs as shown in a programming document or a subsequent amendment.

Current Project Cost

The most recent Right of Way (R/W) and Construction estimate for the project, as determined by the district. The estimate is unescalated and is tied to January 1 of the SFY in which the estimate is made.

Requested Project Cost

The current project cost — increased to account for inflation in future years. The Caltrans share of the current cost should be escalated as follows:

<u>Construction Cost</u>: Using the programming document escalation rates, escalate the current project construction cost to January 1 of the SFY in which the Headquarters' advertising date is proposed. (This may be during a different SFY than is indicated in the programming document.)

<u>R/W</u> <u>Cost</u>: The "Cost RW1-6" screens in the Project Management Control System provides escalated costs in the planned years of expenditure. The escalation rate indicated on the "Cost RW1" screen can be used to adjust costs should it be necessary to advance or delay the planned expenditure. For cost comparison purposes, sum the costs for the years included in the programming document.

Approved Cost

The programmed cost, or the requested project cost approved by the Deputy Director for Transportation Finance, or where delegated, by the District Director. This approved cost does not change the programmed cost. The approved cost provides input to the next programming cycle or is a basis for preparing amendments to existing programming documents.

Ready To List (RTL)

The date on which the Plans, Specifications, and Estimate (PS&E) is complete and all other requirements (such as certification of R/W, permits, and agreements) have been met. Achievement of the Ready to List (RTL) milestone is not affected by unavailability of funds or delayed advertisement for construction season windows.

Project Advertisement

The date on which the project is advertised for construction bids.

ARTICLE 3 - Scope Changes

Scope Approval

The District Director (or delegated District Division Chief) approves the project scope, as defined in the Project Initiation Document (Chapter 9, Article 1, identifies Project Initiation Documents). Once a project is programmed, any changes to the scope may require an amendment of the programming document.

Supplemental Project Development Reports

Any changes in scope should be discussed with the Project Development Coordinator and appropriate HQ program advisor prior to requesting approval. A determination should be made regarding the need for a supplemental project development report. Examples of minor and major scope changes follow:

Minor Scope Changes

Minor scope changes usually do not require amendments to the programming document.

- Small changes to project limits
- Eliminating work that is not required to solve the transportation problem
- Providing required shoulders or safety features
- A change in the engineering solution to the transportation problem. (e.g., for a pavement rehabilitation project: changing from crack, seat, and overlay to overlay)

Major Scope Changes

Major scope changes may require amendments to the programming document.

- Large changes to project limits
- Adding work that is not required to solve the transportation problem
- Adding lanes
- Not providing project features as defined in the programming document
- Eliminating work that will need to be reprogrammed in the next programming document cycle

ARTICLE 4 - Cost Changes

Source of Funding

All cost increases greater than \$300,000 must include a plan outlining how the required funds will be obtained. It should be noted that trade-offs can only be used between projects listed in the same programming document; in some cases the projects must be in the same county.

Right of Way Involvement

To ensure that current Right of Way (R/W) costs are included in total project cost calculations, R/W staff should be contacted on all projects being reviewed for cost changes or where R/W requirements have changed.

Determination of Cost Change

A cost change approval is required if the requested project cost - the sum of the escalated construction and R/W cost - exceeds the sum of the programmed cost for construction and R/W as indicated in the latest adopted programming document or approved amendment. Approval should also be requested for project deletions and significant cost reductions.

General Rules

Cost management for the following programs is handled on a statewide basis by the Programming Program:

- Lands and Buildings Program
- Retrofit Soundwalls Program (District 7 authorized to manage their own)
- Traffic Systems Management (TSM) Plan
- Toll Bridge Funded Program

The Regional Transportation Planning Agency position is needed when considering cost increases on STIP projects.

Due to county minimum requirements, it is best to exercise cost management within individual counties; however, it is recognized that this is not always possible. This should not be a problem for the large counties, but could be relevant in counties with small programs.

The following factors should be considered when applying savings from one project to cover increases on another:

- A transfer of savings should remain within the same programming document.
- Eligible savings are limited to the difference between programmed amount and request for funds (proposed vote by CTC). In cases where the source project is not ready for funding, the savings is the difference between the programmed amount and the requested project cost – the current project cost escalated to fiscal year of advertising. Both construction and right of way costs need to be evaluated to determine savings and a Project Change Request (PCR) must be processed.
- Savings between voted amount and contract award are not eligible for use in these cost management procedures. These savings are used to manage the cost increases after initial vote by the CTC. Districts have not been asked to identify funding sources related to bids being higher than the initial vote, or for changes that occur during the construction contract.

- Adoption of new programming documents establishes a new base and period for the transfer of savings. Savings on projects voted prior to the adoption of new programming documents are no longer eligible for application to other projects.
- Savings on an individual project of \$300,000 or less are not eligible for applying to another project. This is because districts are not required to identify funding sources for cumulative cost increases below \$300,000.
- Savings due to project deletions are available as funding sources. A project deletion request must be transmitted to the Programming Program for processing and approval purposes. See PDPM Chapter 9, Article 19.

Cost Change Balance Sheet

District Program Management or Project Management are responsible for maintaining a separate balance sheet for the SHOPP and STIP programming documents. Individual projects are listed with their cost change indicated.

The balance sheet provides a continuous record of changes from the latest programming documents. A copy of the balance sheet should be submitted with each cost increase request.

ARTICLE 5 - Schedule Changes

Schedule Commitments

Caltrans' programming documents establish a fiscal year commitment for construction funding of individual projects. The CTC staff and others evaluate our ability to meet our construction commitment.

Another delivery commitment is the Annual Project Delivery Schedules Report (Operational Plan) which establishes dates for the "Ready to List" and the "Advertising" milestones. Programming documents and the Annual Project Delivery Schedules Report are used as a base for schedule control purposes.

The Annual Project Delivery Schedules Report was established to assist in managing individual project schedules. For a few projects, the Report's schedules may be earlier or later than the programmed year. In these instances, the commitment to the programming document takes precedence and Caltrans must fully justify late delivery of applicable projects. The Report represents departmentally approved schedules and is the base from which changes are to be requested.

If the current schedule for the "Ready to List" milestone dates are later than the delivery schedule dates, a schedule change must be approved by the district or Headquarters.

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Monthly Report to District Directors

In order to track delivery accomplishments, a monthly report is distributed at the monthly District Director's management meeting. The report compares the target in the Annual Project Delivery Schedules Report against actual accomplishments for the "Ready to List" milestone.

ARTICLE 6 - Database Management

Timely Changes

It is important for the districts to keep the PMCS database current. HQ staff must be informed of district changes, including scope, cost, schedule, splits and combines, etc., so that the appropriate files and documents can be updated. Since PYPSCAN (see Chapter 5 for details) is used to project a district's future workload, the district may have their PY (Person Years) requirements underestimated if the database is out-of-date.